AMENDMENTS TO THE CLAIMS

Listing of Claims:

1. (Currently amended) A transgenic expression cassette for expressing two nucleic acid sequences in a plant cell comprising

i) at least one regulatory sequence ~~selected from the group consisting of~~, and

ii) at least two nucleic acid sequences which are functionally linked to and heterologous in relation to said regulatory sequence,

wherein the regulatory sequence has bidirectional expression activity and comprises

a) the ~~promoter~~ nucleotide sequence shown in SEQ ID NO: 1 or 2, or a fragment thereof having bidirectional expression activity, or

b) ~~functional equivalents of the promoter~~ a nucleotide sequence having at least 98% identity to the nucleotide sequence shown in SEQ ID NO: 1 or 2 ~~which have an identity of at least 80% to the sequence shown in SEQ ID NO: 1 or 2~~ and ~~which have substantially the same promoter~~ having bidirectional expression activity as the ~~promoter~~ nucleotide sequence shown in SEQ ID NO: 1 or 2,

~~c) functional equivalents of the promoter shown in SEQ ID NO: 1 or 2 which comprise at least 25 consecutive nucleotides of the sequences shown in SEQ ID NO: 1 or 2 and which have substantially the same promoter activity as the promoter shown in SEQ ID NO: 1 or 2, and~~

~~d) functionally equivalent fragments of sequences a) or b) or c), which have at least 25 consecutive nucleotides of said sequences a) or b) or c) and have substantially the same promoter activity as the promoter shown in SEQ ID NO: 1 or 2,~~

wherein said regulatory ~~element~~ sequence is disposed between the two nucleic acid sequences ~~and is heterogeneous in relation to said nucleic acid sequences and is functionally linked to said nucleic acid sequences~~ in such a way that the expression of the two ~~different ribo~~nucleic acid sequences is brought about in at least one plant cell, wherein said two ~~ribo~~nucleic acid sequences ~~are selected from ribonucleic acid sequences coding~~ code for

i) amino acid sequences, or

ii) ribonucleic acid sequences which bring about a reduction in the expression of at least one endogenous gene of said plant cell.

2. (Previously presented) The transgenic expression cassette according to claim 1, wherein the two nucleic acid sequences to be expressed transgenically are different and code for one of the following combinations:

i) a selection marker and a reporter protein,

ii) a target protein and a selection marker or a reporter protein,

ii) two target proteins from the same metabolic pathway,

iii) a sense RNA and an antisense RNA, or

iv) various proteins for defense against pathogens.

3. (Previously presented) The expression transgenic cassette according to claim 1, wherein at least one of the two nucleic acid sequences to be expressed transgenically is selected from the group consisting of nucleic acids coding for selection markers, reporter genes, cellulases, chitinases, glucanases, ribosome-inactivating proteins, lysozymes, Bacillus thuringiensis endotoxins, α-amylase inhibitors, protease inhibitors, lectins, RNAases, ribozymes, acetyl-CoA carboxylases, phytases, 2S albumin from Bertholletia excelsa, antifreeze proteins, trehalose-phosphate synthases, trehalose-phosphate phosphatases, trehalases, DREB1A factor, farnesyltransferases, ferritin, oxalate oxidases, calcium-dependent protein kinases, calcineurins, glutamate dehydrogenases, N-hydroxylating multifunctional cytochrome P-450, transcriptional activator CBF1, phytoene desaturases, polygalacturonases, flavonoid 3'-hydroxylases, dihydroflavanol 4-reducases, chalcone isomerases, chalcone synthases, flavanone 3-beta-hydroxylases, flavone synthase II, branching enzyme Q, and starch branching enzymes.

4. (Previously presented) The transgenic expression cassette according to claim 1, wherein at least one of the two nucleic acid sequences to be expressed transgenically is selected from the group consisting of nucleic acids coding for positive selection markers, negative selection markers and factors which provide a growth advantage.

5-7. (Canceled)

8. (Previously presented) A transgenic expression vector comprising the transgenic expression cassette according to claim 1.

9. (Previously presented) A transgenic non-human organism transformed with the transgenic expression cassette according to claim 1.

10. (Previously presented) The transgenic non-human organism according to claim 9, wherein the transgenic non-human organism is selected from the group consisting of bacteria, yeasts, fungi, animal and plant organisms.

11. (Previously presented) The transgenic non-human organism according to claim 9, wherein the transgenic non-human organism is selected from the group consisting of arabidopsis, tomato, tobacco, potatoes, corn, oilseed rape, wheat, barley, sunflowers, millet, beet, rye, oats, sugarbeet, beans and soybean.

12. (Previously presented) A cell, cell culture, part or transgenic propagation material derived from the transgenic non-human organism according to claim 9.

13. (Currently amended) A process for transgenic expression of two ~~ribo~~nucleic acid sequences in plant cells, comprising

I. introducing, into plant cells, a transgenic expression cassette, wherein ~~an~~ the transgenic expression cassette ~~comprising~~ comprises at least one regulatory sequence ~~selected from the group consisting of~~ and at least two nucleic acid sequences which are functionally linked to and heterologous in relation to said regulatory sequence, and

II. selecting transgenic cells which comprise said expression cassette stably integrated into the genome,

wherein the regulatory sequence has bidirectional expression activity and comprises

a) the ~~promoter~~ nucleotide sequence shown in SEQ ID NO: 1 or 2, or a fragment thereof having bidirectional expression activity, or

b) ~~functional equivalents of the promoter~~ a nucleotide sequence having at least 98% identity to the nucleotide sequence shown in SEQ ID NO: 1 or 2 ~~which have an identity of at least 80% to the sequence shown in SEQ ID NO: 1 or 2~~ and ~~which~~

~~have substantially the same promoter~~ having bidirectional expression activity as the ~~promoter~~ nucleotide sequence shown in SEQ ID NO: 1 or 2,

~~c) functional equivalents of the promoter shown in SEQ ID NO: 1 or 2 which comprise at least 25 consecutive nucleotides of the sequences shown in SEQ ID NO: 1 or 2 and which have substantially the same promoter activity as the promoter shown in SEQ ID NO: 1 or 2, and~~

~~d) functionally equivalent fragments of sequences a) or b) or c), which have at least 25 consecutive nucleotides of said sequences a) or b) or c) and have substantially the same promoter activity as the promoter shown in SEQ ID NO: 1 or 2,~~

~~is introduced into at least one plant cell,~~

wherein said regulatory ~~element~~ sequence is disposed between the two nucleic acid sequences ~~and is heterogeneous in relation to said nucleic acid sequences and is functionally linked to said nucleic acid sequences~~ in such a way that the expression of said two ~~different~~ ~~ribo~~nucleic acid sequences is brought about in at least said plant cell, wherein said two ~~ribo~~nucleic acid sequences ~~are selected from ribonucleic acid sequences coding~~ code for

i) amino acid sequences, or

ii) ribonucleic acid sequences which bring about a reduction in the expression of at least one endogenous gene of said plant cell.

14. (Previously presented) The process according to claim 13, wherein the two nucleic acid sequences to be expressed transgenically are different and code for one of the following combinations

i) a selection marker and a reporter protein,

ii) a target protein and a selection marker or a reporter protein,

ii) two target proteins from the same metabolic pathway,

iii) a sense RNA and an antisense RNA, or

iv) various proteins for defense against pathogens.

15-17. (Canceled)

18. (Withdrawn) A process for producing pharmaceuticals or fine chemicals from the transgenic non-human organism according to claim 9, or cells, cell cultures, parts or transgenic propagation material derived therefrom, wherein the process comprises growing or culturing the transgenic non-human organism, or cells, cell cultures, parts or transgenic propagation material derived therefrom, and isolating the desired pharmaceutical or the desired fine chemical.

19. (Previously presented) The transgenic expression cassette according to claim 1, wherein at least one of the two nucleic acid sequences to be expressed transgenically is a nucleic acid coding for a selection marker.

20. (Previously presented) The transgenic expression cassette according to claim 19, wherein the selection marker is selected from the group consisting of proteins which confer a resistance to antibiotics, metabolism inhibitors, herbicides and biocides.

21. (Previously presented) The transgenic expression cassette according to claim 19, wherein the selection marker is selected from the group consisting of proteins which confer a resistance to phosphinothricin, glyphosate, bromoxynil, dalapon, 2-deoxyglucose 6-phosphate, tetracycline, ampicillin, kanamycin, G 418, neomycin, paromomycin, bleomycin, zeocin, hygromycin, chloramphenicol, sulfonylurea herbicides, and imidazolinone herbicides.

22. (Previously presented) The transgenic expression cassette according to claim 19, wherein the selection marker is selected from the group consisting of phosphinothricin acetyltransferases, 5-enolpyruvylshikimate-3-phosphate synthases, glyphosate oxidoreductases, dehalogenase, nitrilases, neomycin phosphotransferases, DOG^R1 genes, acetolactate synthases, hygromycin phosphotransferases, chloramphenicol acetyltransferases, streptomycin adenylyltransferases, β-lactamases, tetA genes, tetR genes, isopentenyltransferases, thymidine kinases, diphtheria toxin A, cytosine deaminase (codA), cytochrome P450, haloalkane dehalogenases, iaaH genes, tms2 genes, β-glucuronidases, mannose-6-phosphate isomerases, and UDP-galactose 4-epimerases.

23. (Previously presented) The process according to claim 13, wherein at least one of the two nucleic acid sequences to be expressed transgenically is selected from the group consisting of nucleic acids coding for selection markers, reporter genes, cellulases, chitinases, glucanases, ribosome-inactivating proteins, lysozymes, Bacillus thuringiensis endotoxins, α-amylase

inhibitors, protease inhibitors, lectins, RNAases, ribozymes, acetyl-CoA carboxylases, phytases, 2S albumin from Bertholletia excelsa, antifreeze proteins, trehalose-phosphate synthases, trehalose-phosphate phosphatases, trehalases, DREB1A factor, farnesyltransferases, ferritin, oxalate oxidases, calcium-dependent protein kinases, calcineurins, glutamate dehydrogenases, N-hydroxylating multifunctional cytochrome P-450, transcriptional activator CBF1, phytoene desaturases, polygalacturonases, flavonoid 3'-hydroxylases, dihydroflavanol 4-reducases, chalcone isomerases, chalcone synthases, flavanone 3-beta-hydroxylases, flavone synthase II, branching enzyme Q, and starch branching enzymes.

24. (Previously presented) The process according to claim 13, wherein at least one of the two nucleic acid sequences to be expressed transgenically is selected from the group consisting of nucleic acids coding for positive selection markers, negative selection markers and factors which provide a growth advantage.

25. (Previously presented) The process according to claim 13, wherein at least one of the two nucleic acid sequences to be expressed transgenically is a nucleic acid coding for a selection marker.

26. (Previously presented) The process according to claim 25, wherein the selection marker is selected from the group consisting of proteins which confer a resistance to antibiotics, metabolism inhibitors, herbicides and biocides.

27. (Previously presented) The process according to claim 25, wherein the selection marker is selected from the group consisting of proteins which confer a resistance to phosphinothricin, glyphosate, bromoxynil, dalapon, 2-deoxyglucose 6-phosphate, tetracycline, ampicillin, kanamycin, G 418, neomycin, paromomycin, bleomycin, zeocin, hygromycin, chloramphenicol, sulfonylurea herbicides, and imidazolinone herbicides.

28. (Previously presented) The process according to claim 25, wherein the selection marker is selected from the group consisting of phosphinothricin acetyltransferases, 5-enolpyruvylshikimate-3-phosphate synthases, glyphosate oxidoreductases, dehalogenase, nitrilases, neomycin phosphotransferases, DOG^R1 genes, acetolactate synthases, hygromycin phosphotransferases, chloramphenicol acetyltransferases, streptomycin adenylyltransferases, β-lactamases, tetA genes, tetR genes, isopentenyltransferases, thymidine kinases, diphtheria

toxin A, cytosine deaminase (codA), cytochrome P450, haloalkane dehalogenases, iaaH genes, tms2 genes, β-glucuronidases, mannose-6-phosphate isomerases, and UDP-galactose 4-epimerases.

29. (Previously presented) Human or animal foods, seeds, pharmaceuticals or fine chemicals produced from the transgenic non-human organism according to claim 9, or cell, cell cultures, parts or transgenic propagation material derived therefrom.

30. (Withdrawn) The fine chemicals according to claim 29, wherein the fine chemicals are antibodies, enzymes, pharmaceutically active proteins, vitamins, amino acids, sugars, saturated or unsaturated fatty acids, natural or synthetic flavorings, aromatizing substances or colorants.

31. (New) A method for identifying and/or isolating a regulatory sequence with bidirectional expression activity, comprising

preparing fragments of the nucleic acid sequence of SEQ ID NO: 1 or 2,

testing the fragments obtained for bidirectional expression, and

identifying and/or isolating a fragment with bidirectional expression activity.

32. (New) An expression cassette for expressing two nucleic acid sequences in a plant cell comprising at least one regulatory sequence, wherein the regulatory sequence has bidirectional expression activity and comprises a fragment obtained by the method of claim 31.

33. (New) The expression cassette of claim 32, further comprising at least two nucleic acid sequences which are functionally linked to and heterologous in relation to said regulatory sequence, wherein said regulatory sequence is disposed between the two nucleic acid sequences in such a way that the expression of the two nucleic acid sequences is brought about in at least one plant cell.

34. (New) A method for identifying and/or isolating a regulatory sequence with bidirectional expression activity, comprising

providing the nucleic acid sequence of SEQ ID NO: 1 or 2,

obtaining variants of the nucleic acid sequence of SEQ ID NO: 1 or 2,

testing the variants obtained for bidirectional expression, and

identifying and/or isolating a variant with bidirectional expression activity.

35. (New) An expression cassette for expressing two nucleic acid sequences in a plant cell comprising

i) at least one regulatory sequence, and

ii) at least two nucleic acid sequences which are functionally linked to and heterologous in relation to said regulatory sequence,

wherein the regulatory sequence has bidirectional expression activity and comprises a variant of SEQ ID NO: 1 or 2 obtained by the method of claim 34, and wherein the regulatory sequence is disposed between the two nucleic acid sequences in such a way that the expression of the two nucleic acid sequences is brought about in at least one plant cell.

36. (New) The transgenic expression cassette of claim 1, wherein the regulatory sequence comprises the nucleotide sequence shown in SEQ ID NO: 1 or 2, or a fragment thereof having bidirectional expression activity.